

The NATIONAL HORTICULTURAL MAGAZINE



JOURNAL OF THE AMERICAN HORTICULTURAL SOCIETY

OCTOBER, 1949

The American Horticultural Society

PRESENT ROLL OF OFFICERS AND DIRECTORS

July, 1949

OFFICERS

President, Dr. Fred O. Coe, Bethesda, Md.
First Vice-President, Mr. Frederic P. Lee, Bethesda, Md.
Second Vice-President, Mrs. Robert Woods Bliss, Washington, D. C.
Secretary, Dr. Conrad B. Link, College Park, Md.
Treasurer, Mr. Carl O. Erlanson, Silver Spring, Md.
Editor, Mr. B. Y. Morrison, Takoma Park, Md.

DIRECTORS

Terms expiring 1950
Mrs. Walter Douglas, Chauncey, N. Y.
Mrs. J. Norman Henry, Gladwyne, Pa.
Mrs. Arthur Hoyt Scott, Media, Pa.
Dr. Freeman Weiss, Washington, D. C.

Terms expiring 1951
Mrs. Mortimer J. Fox, Peekskill, N. Y.
Miss Alida Livingston, Oyster Bay, N. Y.
Dr. David V. Lumsden, N. Chevy Chase, Md.
Dr. V. T. Stoutemyer, Los Angeles, Calif.
Dr. Donald Wyman, Jamaica Plain, Mass.

HONORARY VICE-PRESIDENTS

Mr. W. E. Walton, Pres.,
American Begonia Society,
1415 Acacia Ave.,
Torrance, Calif.
Judge Arthur W. Solomon, Pres.,
American Camellia Society,
702 W. Anderson St.,
Savannah, Ga.
Mr. Carl Grant Wilson, Pres.,
American Delphinium Society,
22150 Euclid Ave.,
Cleveland, Ohio
Dr. Joseph Ewan, Pres.,
American Fern Society,
Tulane University,
New Orleans 18, La.
Mr. Frank E. Moots, Pres.,
American Peony Society,
Newton, Kans.
Mrs. Carroll S. Higgins, Pres.,
American Primrose Society,
2424 N. E. 32d Ave.,
Portland, Ore.

Mr. Harold Epstein, Pres.,
American Rock Garden Society,
5 Forest Court,
Larchmont, N. Y.
Mr. George A. Sweetser, Pres.,
American Rose Society,
36 Forest St.,
Wellesley Hills, Mass.
Mr. Wm. T. Marshall, Pres. Emeritus,
Cactus & Succulent Society of America,
228 Security Bldg., Phoenix, Ariz.
Mrs. Oliver B. Capen, Pres.,
Herb Society of America,
Bedford, N. Y.
Dr. Robert Craig, Pres.,
Cactus & Succulent Society of America,
14326 So. Holt St.,
Baldwin Park, Calif.
Mrs. Frances S. Belant, Pres.,
Midwest Horticultural Society,
101 N. Central Park Blvd.,
Chicago 24, Ill.

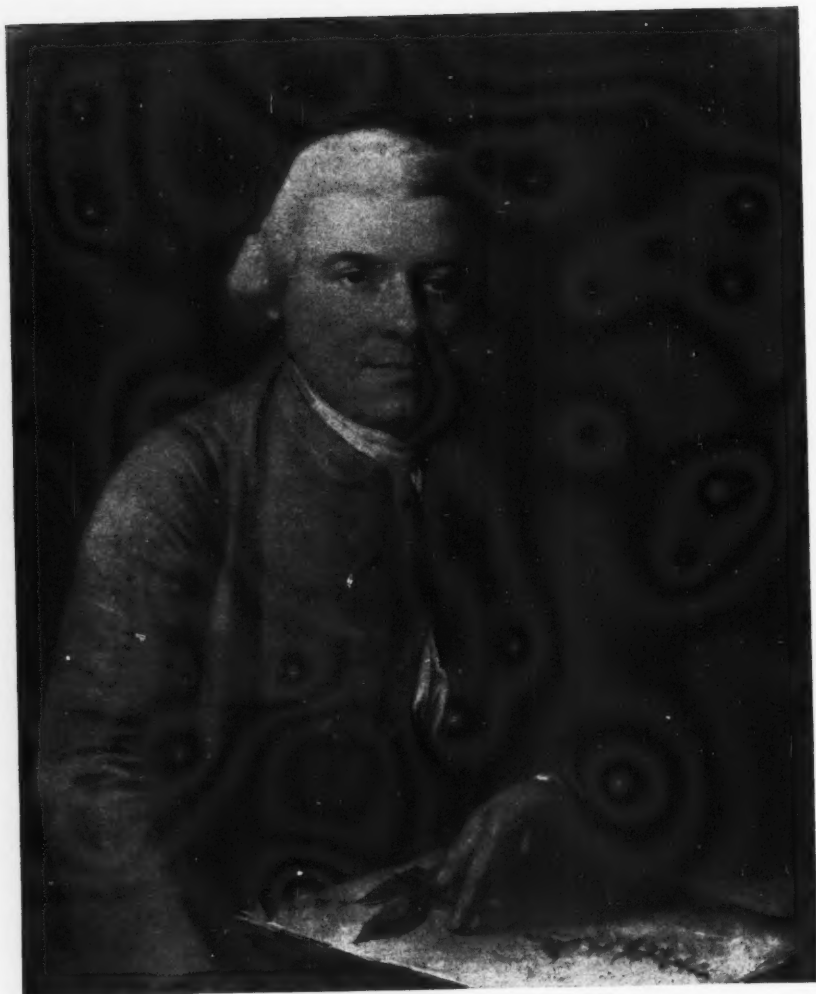
SOCIETIES AFFILIATED WITH THE AMERICAN HORTICULTURAL SOCIETY

1949

American Begonia Society,
Mrs. Mary Hazel Drummond, Pres.,
1246 No. Kings Road,
Hollywood 46, Calif.
American Camellia Society
Box 2398 University Station
Gainesville, Florida
Arlington County Garden Club,
Mr. Wales C. Brewster, Pres.,
3015 Second St., N.,
Arlington, Va.
American Fuchsia Society,
Headquarters: Calif. Acad. of Sciences,
Golden Gate Park,
San Francisco, Calif.
American Iris Society,
Mr. Sam Caldwell, Secy.,
444 Chestnut St.,
Nashville 10, Tenn.

American Primrose Society,
Mr. Carl Maskey, Secy.,
2125 5th Ave.,
Milwaukie, Ore.
American Rose Society,
Dr. R. C. Allen, Secy.,
Box 687, Harrisburg, Pa.
Benson Garden Club
c/o Mrs. D. M. Bowen,
4244 Burdette St.,
Omaha, Nebr.
Cactus & Succulent Society of America,
Dr. Robert Craig, Pres.,
14326 So. Holt St.,
Baldwin Park, Calif.





Courtesy The Royal Horticultural Society

William Curtis

The Botanical Magazine

PATRICK M. SYNGE

The *Botanical Magazine* was founded in 1787 by William Curtis and has been published continuously since then. It is indeed, the oldest current scientific periodical of its kind with colored illustrations in the world, and in the beauty of production and the high standard of its contributions it can claim a unique place.

Curtis defined the aims of the magazine as one "in which the most ornamental Foreign plants, cultivated in the open ground, the greenhouse and the stove, are accurately represented in their natural colour . . . a work intended for the use of such ladies, gentlemen and gardeners as wish to become scientifically acquainted with the plants they cultivate." This aim is still maintained, although with more emphasis on hardy plants.

All over the world both botanists and gardeners use the long ranks of well bound volumes of the *Botanical Magazine* and it is affectionately referred to in conversation as the "Bot. Mag.". For me, as for many others, it has always been a Magazine unlike any other in the world, and I find both the history of its publication and its struggles fascinating as is also the larger romance and history of plant collecting which is contained in its pages. Merely to turn over the plates of a volume is a never ending pleasure and I rarely open a part or a volume to consult one plate without wandering over the other plates as well and invariably learning something I didn't know before or seeing some plant which I would particularly like to grow.

At present each part of the Maga-

zine contains one double plate and ten single plates and four parts are published during the year. These plates are made from water colour drawings prepared with great care and accuracy by the artists. Up till very recent days also each plate was coloured by hand from a standard colour pattern prepared by the artist. The plants figured are chosen from the collections at Kew as well as from other famous gardens. It is open, however, to any horticulturist to suggest or offer plants for figuring in the Magazine and such suggestions are welcomed. There is still a certain prestige attached to having a plant figured in the Magazine. In normal circumstances, however, a plant once figured will not be figured again unless some new material or factor has been discovered. Notable hybrids, particularly first crosses between species or hybrids of bigeneric origin, are included from time to time, and a recent example of this is the fine *Caryopteris* x *clandonensis* which appeared in the garden of Mr. A. Simmonds, our deputy Secretary, at Clandon, while a plate of the beautiful *Viburnum* x *bodnantense* has been made for a subsequent part. This plant, a hybrid between *V. fragrans* and *V. grandiflorum*, raised at Bodnant, the garden of our President Lord Aberconway, must rank as a very notable addition to the winter flowering shrubs available for English gardens and for the gardens of those parts of the U.S.A. which are not snow-bound all the winter.

Each plate is accompanied by a description of the plant, its systematic position, its discovery and its distri-

bution as well as some details of its cultivation in the actual garden where the plant figured was grown.

The plants illustrated have a very wide range. In the older numbers the European and South African plants predominate, many having been introduced by early travellers and merchants. During the last century English gardens were enriched by the American plants introduced by Lobb and Douglas and many were figured in the Magazine, while in this century the wealth of Chinese and Tibetan species introduced by Wilson, Farrer, Forrest, Kingdon-Ward and now Ludlow and Sherriff have been figured freely. It is a continuous story, as much alive now as it was two centuries ago, a story which will continue as long as the spirit of adventure remains with our gardeners and botanists. Each plate with its accompanying text takes us on a miniature journey of exploration.

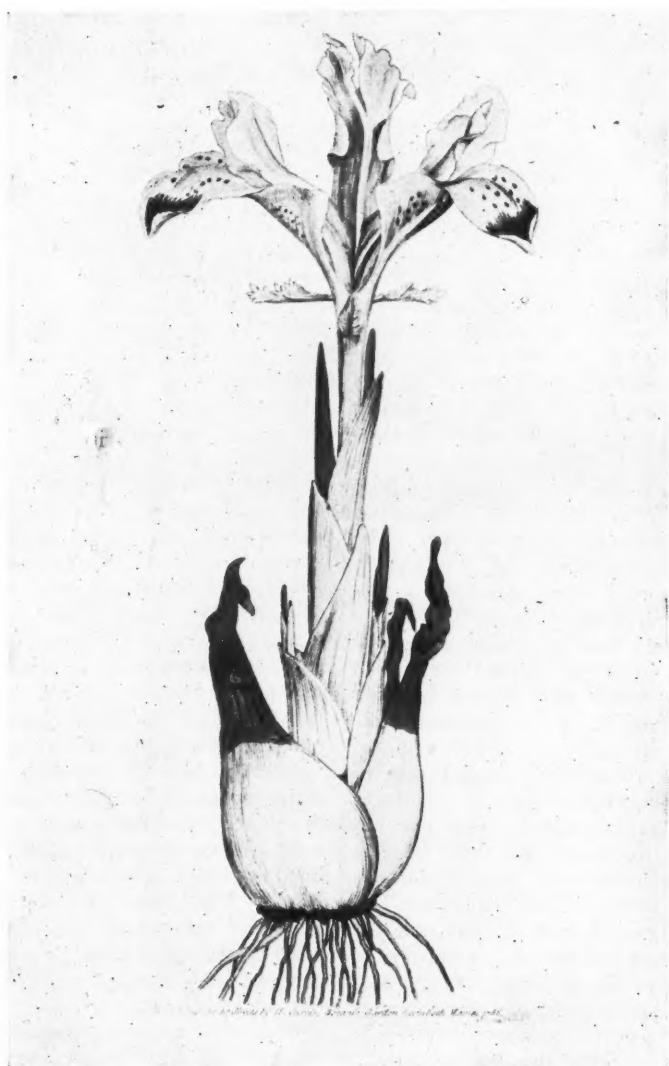
The first plate was *Iris persica*, and it is still, to my mind, one of the most delightful ever issued. Unfortunately, although mentioned in Parkinson's *Paradisus* in 1628, this is still a rare and difficult plant in cultivation. Curtis writes: "Its beauty, early appearance and fragrant blossoms, make it highly esteemed by all lovers of flowers; like the hyacinth or Narcissus it will bloom within doors in a water-glass, but stronger in a small pot of sand, or sandy-loam; a few flowers will scent a whole apartment." This was followed by *Rudbeckia purpurea* and the Winter Aconite (*Eranthis hyemalis*) then known as *Helleborus hyemalis*. The first plate of the second part is a charming representation of *Cyclamen coum*. All these early plates are described as "Published as the Act directs by W. Curtis, Botanic Garden, Lambeth Marsh." Curtis himself

edited and published the *Botanical Magazine* up to the time of his last illness. He died in 1799. On his gravestone was inscribed the following verse, a fitting hope

"While living herbals shall spring
profusely wild
Or garden cherish all that's sweet
and gay;
So long thy works shall praise,
dear Nature's Child,
So long thy memory suffer no
decay."

The *Gentleman's Magazine* lamented "Where shall we find his equal in botanical taste and accuracy!"

The great majority of the plants figured during the early years of the Magazine are hardy European plants with a sprinkling of plants from Eastern North America and from the Cape of Good Hope. These latter increased with the frequent introductions of Ericas, Pelargoniums, Mesembryanthemums, Gladioli and other such plants, but a few South American plants were grown and figured at this time such as *Sprekelia formosissima* (Plate 66), and *Fuchsia magellanica* (under the name of *F. coccinea*) (Plate 97). This was then regarded as a stove plant. Even a few plants from Australia, such as *Acacia verticillata* (Plate 110), are figured at this period. Another most charming plate of this time is the pink Moss Rose (Plate 69), and the quality of pinkness in the copy in the Lindley Library of the R.H.S. seems to have been retained unimpaired. Other plates using more solid colour such as the *Papaver orientale* (Plate 57), have darkened with the passage of time, but there are only a few like this. The first Camellia, a single pink form of *Camellia japonica*, was figured in the second volume as Fig. 42, while the first double folding plate was given in Volume 4 to the



Iris persica

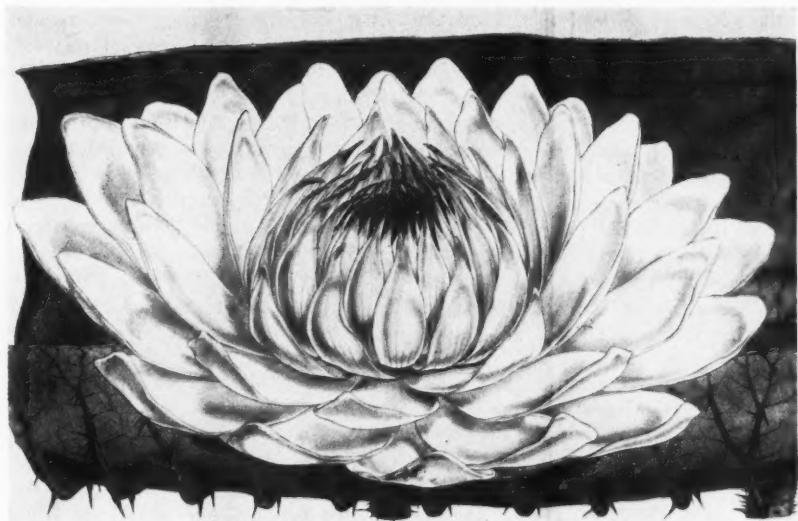
The first published plate in Curtis Botanical Magazine

magnificent *Stretlitzia Reginae* (Plate 119). This plant had only been introduced by Sir Joseph Banks from the Cape of Good Hope in 1773, and it was figured in the *Botanical Magazine* in 1791.

In 1805 the Horticultural Society of London, the precursor of the R.H.S. had been founded and collectors were being sent to various parts of the world, among them Don to West Africa, Douglas to North America and Fortune to China. Joseph Hooker's own journeys to the Himalayas also belong to this period, and he himself introduced many of the Himalayan *Rhododendron* species and other plants figured in the Magazine. It is impossible here to give any kind of list of the more notable plates. Each was notable for some reason or other. The first representation of the Lotus (*Nelumbo nucifera speciosum*) appeared in 1806 (Plate 903) and a larger and finer couple of plates appeared in 1842 (Plates 3916-17): *Victoria regia* was figured in 1847 (Plate 4275), a magnificent triple plate. Sir William Hooker wrote of this in probably the longest text of any in the whole history of the Magazine. "It has always been our endeavour to commence a New Year in the Magazine with some eminently rare or beautiful plant; but never had we the good fortune on any occasion to devote a number to a production of such pre-eminent beauty, rarity, and we may add celebrity, as that now presented to our Subscribers; worthy as we have no doubt they will agree with us in thinking, to occupy the entire number." *Magnolia Campbelli* appeared in 1885 (Plate 6793) a very beautiful double plate, and Sir Joseph Hooker was able to write a eulogy of it from first-hand knowledge of the trees in their native habitat.

Among notable plant introductions of more recent days which have formed unusually beautiful plates is *Gentiana sino-ornata* (Plate 9421), perhaps the finest introduction of that prolific collector George Forrest. It is unlikely that any more brilliant blue has ever been put on paper than in this plate. Another favourite Gentian of mine is *Gentiana Farreri* (Plate 8874) that electric blue flowered "grass" that Reginald Farrer described first with such ecstasy from "Thundercrown" that romantic mountain on the far distant Marches of Tibet and China and then collected later from the Tatung range 200 miles North. This Gentian first appeared among seed capsules collected by Farrer's Tibetan collectors and it is not quite certain whether Farrer's own description of it applies to his Gentian or to *Gentiana hexaphylla*; however, it is such a fine piece of description that I think we might venture to quote it as it is given in the text accompanying the *Botanical Magazine* plate. He describes the flower as being visible in the grass $\frac{1}{4}$ -mile away and "indescribably fierce luminous Cambridge blue within, with a clear white throat, while, without, long vandykes of periwinkle purple alternate with swelling panels of nankeen outlined in violet and with a violet median line." *Nomocharis Farreri* (Plate 9557) is another of my favourites, being a plate of a plant of real character as finely finished and as distinctive as any Orchid.

The later volumes appearing after the first World War are particularly rich with fine plates of the genera *Rhododendron*, *Primula*, *Gentiana*, *Cyananthus* and *Nomocharis* and now as political disturbances and difficulties hedge in the collector's range to better known ground, it is unlikely that we shall ever know so rich a harvest again,



Courtesy The Royal Horticultural Society

Victoria Regia

Curtis Botanical Magazine Plate 4274

This plate which is a double plate covering two full pages was of necessity greatly reduced in order to fit our own small page, but one can see even with this reduction, the delicacy of the details in the drawing itself and gauge the tonalities. It shows the bit of petiole in lower right hand corner and torn left margin suggests the size of the leaf.

although I am certain that there are many fine plants still to be discovered in the regions of the Himalayas, Tibet and Southwestern China.

William Curtis, the founder, was an interesting character. An account of his life and work by Mr. J. E. Lousley was published in the *Journal R.H.S.* 71, 98-100, 124-129 (April and May, 1946) in connection with the bicentenary of his birth. A biography of him has also been published by Mr. W. Hugh Curtis of the Curtis Museum, Alton, Hants.*

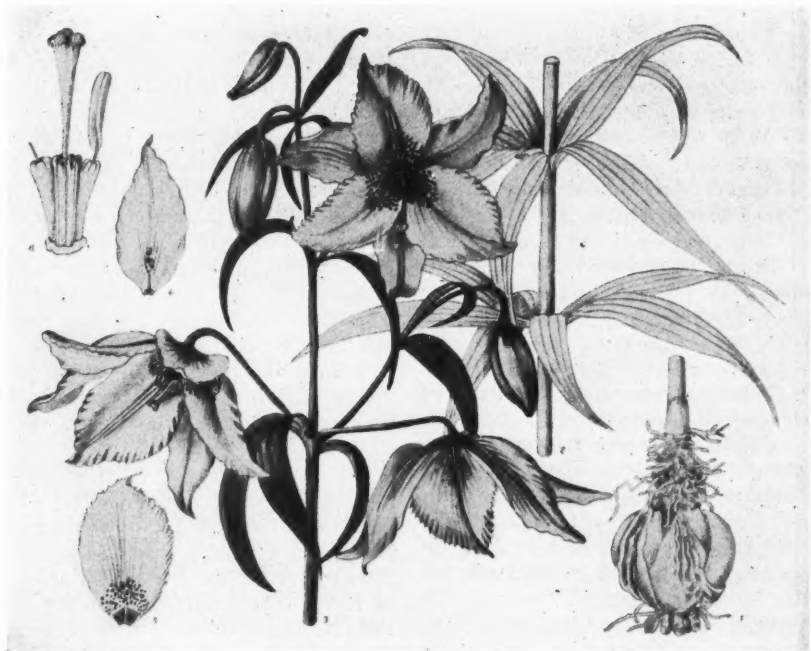
He was the eldest son of John Curtis, a tanner of Alton. When at school he first showed that passion for plants and insects, which were to form his life work. He was given a plot in his father's garden. Mr. Hugh Curtis records that "Even then his power of observation was acute, for a part of the plot, his father notices, was occupied by plants which he knew as weeds: these, he ascertained, were not there through sloth or neglect, but, because certain insects and caterpillars were seen to have a predilection for them." Later Curtis was apprenticed to his grandfather an apothecary in Alton. At this time he formed a close friendship with William Legg an ostler at the neighbouring Crown Inn. Legg also had a passion for Natural History and it is recorded that there were few wild plants in the neighbourhood that he could not name. Together they roamed the countryside and studied the Herbals of Parkinson and Gerard. At the age of twenty, his father, possibly disturbed by this association, sent him to London as apprentice to another apothecary, this time in Pudding Lane. He stuck as an apothecary till 1770, although with some deviations towards his own bent of Natural History. Mr. Hugh Curtis records an episode in which Mr. Talwin, his employer at

that time, found among Curtis's papers an engraving of a common nettle for which he had paid no less than *three guineas*. Such "recklessness" earned Curtis a strong talk from his employer but the matter was patched up and when he died a little later, Mr. Talwin left Curtis his practice. He soon attracted the notice of prominent naturalists of the day, and in 1772 was appointed "Demonstrator of Plants and Praefectus Horti" at the Chelsea Physic Garden. His first large publication with coloured plates was the folio *Flora Londinensis*, but on this he lost money and the work was not completed in his lifetime. In 1787 he started *The Botanical Magazine*, possibly with a view to recouping some of his losses on the *Flora Londinensis*. Each part contained three plates, hand-coloured, and was sold for one shilling. Parts were published monthly and the circulation reached the high level of three thousand, a figure which has seldom been reached since. Curtis himself, is recorded as saying that the *Flora* brought him praise but the *Botanical Magazine* brought him pudding.

Rivals to the *Botanical Magazine* quickly sprang up. In 1792 was published the first part of Andrews' *Botanists' Repository*. Sydenham Edwards started the *Botanical Register* in 1815, while in 1818, the first volume of Lodiges' *Botanical Cabinet* appeared. All of these works were similar in arrangement and idea to the *Botanical Magazine*, but none survived beyond the middle of the nineteenth century. By 1827 there were no fewer than ten English serial publications illustrating in colours the cultivated plants of English gardens.

Curtis was succeeded as editor by his friend Dr. John Sims, whose name

*William Curtis, 1746-1799. By W. Hugh Curtis (Warren & Son, Winchester, 1941).



Courtesy The Royal Horticultural Society

Nomocharis Farreri

Curtis Botanical Magazine Plate 9557

This again is a reproduction of a double page, but of a plate much later in the series. One finds in it still the wealth of fine detail, and in the plant itself, more of interest to be depicted. It is a matter of some chagrin that no photographs of this or any other species of *Nomocharis* have been shown in our own magazine, that attempts to be a leader in plant materials.

appears first on the title page of Volume 15 for 1801. During this period the plates were mostly drawn by Sydenham Edwards, the young son of a Welsh schoolmaster. Curtis saw some samples of his work, called him to London when quite a young lad and trained him in botanical drawing and painting along his own lines. It was a happy association and Edwards stayed with the Magazine till 1815. Many of his original drawings are now in the Kew collections. James Sowerby, whose name is always linked with his famous Botany, also completed some of the plates.

A new series was started in 1815, when Sydenham Edwards left the Magazine, and another in 1826, when Dr. Sims retired from old age and the editorship was taken over by William Jackson Hooker, then Professor of Botany at Glasgow, and later (as Sir William Hooker), Director of the Royal Botanic Gardens, Kew. He must have been a man of great energy and character, and under him the *Botanical Magazine* entered a new era. The third series ran from Vol. 54 to Vol. 71 in 1845, when the firm of Reeve Brothers (later Lovell Reeve and Co.) took over the proprietorship of the Magazine. Hooker, however, remained as editor, and the Magazine became closely associated with Kew. This association has lasted to the present day, always intimate, but never official. This association was emphasized by the new wording on the title page which has remained essentially the same up to the present day and in the adoption on the title page of the vignette of the Palm House at Kew which still appears.

During the early years of his editorship, William Hooker executed the majority of the plates himself as well as acting as editor and writing the texts.

However, he was lucky enough to find a very accomplished apprentice artist in W. H. Fitch, who was the son of a book-keeper in a firm of Glasgow flax merchants and had learnt his drawings in the form of patterns for calico, muslins, etc. Fitch's first drawings appeared in the *Botanical Magazine*, 1834, and from 1845 he was able to combine the positions of artist and lithographer, no mean achievement. The plates undoubtedly benefited from this and his bold colouring and delicate line has never been surpassed. Fitch worked for the Magazine till 1878, and executed no fewer than 2,800 plates.

Sir William Hooker died in 1865 and was followed as editor by his son, Joseph Dalton Hooker (afterwards Sir Joseph Hooker), who also became Director of the Royal Botanic Gardens at Kew. The period of editorship of the two Hookers was a time of great activity in the collection and introduction of plants to England.

Among the artists Fitch was succeeded by Miss Matilda Smith, who was the sole artist from 1887 to 1920 and who contributed no fewer than 2,300 plates. In the recent period we have the work of Miss Lilian Snelling, who has painted some of the most graceful and beautiful plant drawings ever made. Her plates for the majestic Supplement to Elwes' Monograph of the Genus *Lilium* I regard as one of the high levels of flower paintings. Now Miss Stella Ross-Craig and Miss Ann Webster are executing the majority of the plates.

In 1922 the publication of the *Botanical Magazine* was undertaken by the Royal Horticultural Society and the Fellows of the Society are the owners of the Magazine, and through the members of the Council, the trustees of a notable and a great tradition.

After the 1914-19 war the Magazine passed through difficult times and the former owners were compelled to discontinue publication owing to the increased cost of production. The magazine was rescued by the action of a few public-spirited men, several of them still members of the Council of the Society, who purchased the Magazine and presented it to the Society. During the second World War and immediately after, the publication of the Magazine again fell into arrears. It was no longer found possible to secure colourists who would be willing and skilful enough to colour the copies of the Magazine by hand, no small task. Through the years the plates of the Magazine had increased in complexity and detail, and the laborious task of hand-colouring had increased accordingly. Consequently, after a prolonged search for colourists, during which the work of no fewer than 100 artists was tested, the Council decided that a mechanical means of colour reproduction was necessary and the volume for 1949 has had plates printed in colour gravure. So great have been the developments in colour printing, that it is estimated that this printing does not fall short of the former hand-colouring method. It will also enable greater numbers to be printed, but necessarily at a much greater cost. The same meticulous care is still taken over the colour correction of the plates before printing. Certainly the colour printing has brought greater uniformity and the rather charming, although probably botanically undesirable variations that the human factor of hand-colouring introduced are no longer present. However, it is of no avail to try and go backwards, we must accept the best that the present mechani-

cal age can produce and in the case of colour printing it is undoubtedly a very high standard.

Necessarily the edition of the Magazine is limited in numbers and previous volumes of the Magazine, and especially complete sets, are now very valuable indeed, as well as being highly treasured possessions. Volume 165 began a new series, and in order to simplify reference, the plates have been numbered from No. 1. It is therefore, an ideal time to begin a subscription to the Magazine. The Magazine is no less than a national tradition and in the words of a former editor it ought to be a matter of national pride to support it, remembering that botanists and gardeners throughout the world have relied now for 160 years on the inspiration and help they have received from the *Botanical Magazine*. Dr. W. B. Turrill, the Keeper of the Herbarium at Kew, was appointed Editor from the beginning of this series.

The Royal Horticultural Society is very anxious to make the Magazine better known among American gardeners and botanists, believing that as their gardens grow and as the range of plants for them increases they will find, as so many of us have found, never ending delight in the beautiful volumes and in the authoritative texts which accompany them. They will come to look forward as we do to the appearance of the somewhat old fashioned period cover with its charming drawing of the Palm House at Kew and the familiar quotation from Wordsworth:

"With tender heed,
Bringing thee chosen plants and
blossoms blown
Among the distant Mountains."

The Early History of the Persian Cyclamen

WALTER C. BLASDALE

Although the modern florist's cyclamen has long been associated with the word Persian the natural species from which it was derived has never been found growing spontaneously within the confines of Persia or modern Iran. These statements present a problem for which we have as yet no satisfactory solution; nevertheless a discussion of it brings to light a number of remarkable episodes relating to the history of this plant which are of decided interest to those who find pleasure in delving into the history of cultivated plants.

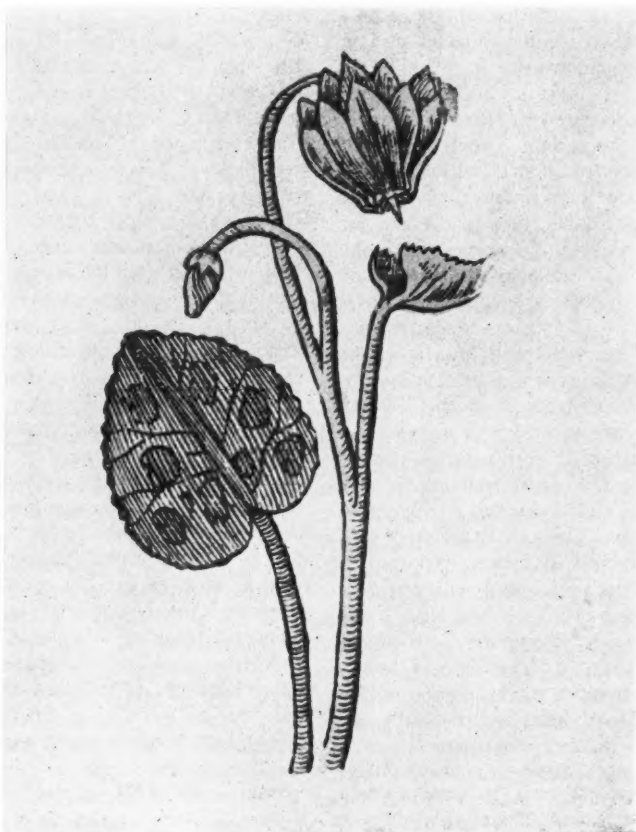
I will first refer to the Garden Book of Sir Thomas Hanmer which, though written in 1659, was not actually published until 1933. It contains valuable information concerning the history of many of our most cherished garden plants. In it we find accounts of four kinds of cyclamen. Among them is the "Cyclamen of Persia" which "flowers most of the winter and is rare with us." He also alludes to cyclamen from Antioch and Lebanon. At that period many plants of ornamental value, especially those which produce corms or bulbs, were being introduced into England from the Levant by way of Constantinople. It is also known that the natural form of the Persian Cyclamen grows in Lebanon, Syria, Palestine, and Cilicia and it seems probable that its corms may have been introduced from one of these countries by the time Hanmer wrote his book and were erroneously credited to Persia.

A second source of information is to be found in a garden book of still earlier date (1629), namely the better known *Paradisus Terrestris* of John

Parkinson. He describes therein *Cyclamen Antiochenum autumnale, flore purpureo duplici*, the double, red, autumn flowering cyclamen of Antioch. That ancient city, still famous as the scene of many important historical events, is situated on the Orantes River, some miles to the east and south of the great plain of Cilicia in Asia Minor. Its location is of significance because in 1928 Walter Siehe, in the *Jahrbuch der Deutschen Dendrologische Gesellschaft*, page 264, reported the abundant and wide spread occurrence of the Persian Cyclamen on the Cilician plain.

Among other things Parkinson states: "The Sowebread of Antioch with double flowers, hath his leaves somewhat round like unto the leaves of the Summer Sowebread, but with less nobbes or corners and more full of white spots on them, which are very large, with ten or twelve apiece, of a faire Peach colour, like unto the flowers of purple Sowebread of the Spring and deeper at bottom. There are of this kind some, whose flowers appear in the Spring and deeper at the bottom. There are of this kind some, whose flowers appear in the Spring, are as large and as double as the former but of a pure white colour. There are of these Sowebreads of Antioch, that hath but single flowers, some appearing in the Spring and others in Autumn."

A study of this description and the accompanying drawing, which I have reproduced, has convinced me that *C. Antiochenum* is the plant from which the modern Persian Cyclamen has been derived. The similarity of its rounded,



cordate leaf blades to those of the Summer Cyclamen (*C. europaeum*), the distinctive zone of conspicuous white patches near the margins of the leaf blades and the extension of its period of bloom through winter and spring all link it with *C. persicum*. The drawing shows two leaves, a flower, and a flower bud all supported on the same stalk. These are teratological peculiarities both of which are known to appear in the Persian Cyclamen. Drawings of plants showing fusion of leaf

and flower stalks are to be found in a paper by Masters in Jour. of Royal Hort. Soc. 13 (1891), p. 169 and in Lüdi's account of the *Primulaceae* in Vol. V-3, p. 1730 of Hegi's Flora of Central Europe. A plant in which one petiole supported two leaves, exactly as shown in Parkinson's drawing, appeared in a batch of seedlings grown by me recently and the firm that sold me the seed wrote, in reply to my inquiry, that such plants were not rare in their greenhouses but were always

discarded. Similarities in the structure of petioles and peduncles and in the fact that both arise from knob like protuberances peculiar to the species, and are separated on these protuberances by remarkably small intervals, make it easy to understand how fusion of either petioles or peduncles or of both might readily take place. So far as I can ascertain *C. persicum* is the only species of the genus in which such abnormalities have been recorded.

Doubling of the petals of many ornamental plants was well known at the time of Parkinson and descriptions of double flowered forms of the Persian Cyclamen are to be found in more recent literature. Parkinson's drawing represents the most common of the forms of doubling known to appear in this species. The only other species in which doubling has been reported is *C. europeum* and I find only one record of this.

Parkinson's account of *C. Antiochenum* appears to have been ignored, probably because it represents an abnormal form, although he calls attention to the fact that there is a normal form of it. Since *C. persicum* is the only species known to produce abnormal leaf and flower stalks and, with the exception of *C. europeum*, the only species known to produce double flowers his description and drawing supports the view that *C. Antiochenum* is an early form of the modern Persian Cyclamen.

The first appearance of the Latin name *C. persicum* in an English publication is found in the sixth edition of Miller's Garden Dictionary (1768). Eight species are there listed, of which No. 3 is called *C. persicum* and No. 4 *C. vernale*. There is obvious confusion, which has been recognized by other writers, in Miller's descriptions and the associated numbers. The more

detailed accounts of these species, which follows his numerical list, make it clear that his No. 4 should have been associated with the name *C. persicum* rather than *C. vernale* and vice versa. This conclusion is confirmed by the fact that the No. 4 description closes with the letters H. R. Par. (Hortus Regius Paris) which indicates that the name *C. persicum* and part of the accompanying description was taken from a catalogue of plants growing in the Royal Garden at Paris printed in 1665. The same name and description was in turn taken from a catalogue of plants growing in the garden of the Abbey of St. Germain, compiled by Jonquet and printed in 1658. This is the first known date of the appearance of the name *C. persicum* but we do not know the name of the person who first used it or why it was chosen for this plant. This earliest description was elaborated upon somewhat by Miller. He states that the "Persian Cyclamen hath large, angular, heart shaped leaves whose edges are entire; they are veined and marbled with white on the upper side and stand up on pretty long stalks; the flowers are large, of pale purple colour, with a bright red or purple bottom. They appear in March or April and the seed ripens in August."

Miller's account of *C. persicum* was improved upon by Curtis in Vol. 2 of the Botanical Magazine (1788) and is accompanied by an excellent colored plate which clearly represents an early form of the modern Persian Cyclamen. Curtis was a personal friend of Miller and probably familiar with specimens of the plant on which Miller based his account of the species. Curtis also states that *C. persicum* was introduced into England long after the European species and since *C. persicum* is a native of the East Indies it is tender and needs greenhouse treatment. In view

of the preceding statements this is surprising and calls for a lengthy explanation.

In 1748 Linnaeus published *Flora Zeylanica* which is an account of plants collected by Paul Hermann in Ceylon between 1670 and 1677. In it Linnaeus describes very briefly a species of cyclamen said to be known to the natives of that island as *Urala*. In his *Species Plantarum* (1753) and his *Genera Plantarum* (1754) he associates the same description with the name *C. indicum*. It is based upon a drawing referred to Hermann of a plant said to have been collected in Ceylon. The description states that the petals are not reversed; this might be true of the *Papilio* or *Rococo* forms of the Persian Cyclamen but these were not known until about 1906. It also states that the scapes were "*circinnati*"; this seems to mean that they were coiled which is true of all of the species except *C. persicum*. Miller lists both *Species Plantarum* and *Genera Plantarum* in the list of works used in preparing his Dictionary but makes no mention of *C. indicum* in his account of the species of cyclamen. Presumably he considered the brevity and remarkable features of Linnaeus' description made it unworthy of consideration. Curtis however appears to have accepted the statement that the Persian Cyclamen was of East Indian origin although he used the specific name *persicum* rather than *indicum*. Nevertheless the name *indicum* was taken up by a number of botanists and continued to be used to some extent almost up to the present decade.

It has now been established that no species of cyclamen grows naturally in Ceylon. Henry Triman, in Part 3 of his *Handbook of the Flora of Ceylon* (1895), states: "There is no specimen in Hermann's herbarium but his draw-

ing appears to represent a cyclamen. If found in Ceylon it must, of course, have been cultivated." In a supplementary volume to this work A. H. G. Alston states: "The name *Urala* or *Urala* means Pig's Yam and is used for two small species of *Cuculio* but Linnaeus' description is a cyclamen." I find that *Cuculio* is an Iridaceous genus; hence there is good reason for rejecting Ceylon as a habitat of the Persian Cyclamen and the plant on which Hermann based his drawing is a mystery.

Another work to be considered in dealing with this subject is Tournefort's *Institutiones Rei Herbariae* (1719). In it we find very brief statements relating to 33 species of cyclamen some of which are associated with binomial names and others with longer captions. Apparently much of the information there presented is taken from other works and it is not possible to ascertain how much of it is based upon personal study of specimens. He makes use of the names *C. persicum* and associates it with Jonquet's description just as Miller does. He also uses the caption *Cyclamen Antiochenum autumnale, flore purpureo duplici*, clearly taken from Parkinson's work. The names *persicum* and *Antiochenum* were therefore used in both England and France, apparently with the belief that they represented different but closely related species.

In 1893 M. Bonnet published in *Journal de Botanique*, 7 (1893), p. 194 an account of the species of cyclamen then available in the herbarium of the *Jardin des Plantes*. Since that institution was formerly known as the *Hortus Regius* it is probable that the specimens studied included those used by Tournefort in preparing his summary. Bonnet's work led him to two conclusions. First, that the *C. persicum* of

Joncquet, Tournefort, and other French writers did not represent *C. persicum* as we now know that species but the *C. repandum* of Sibthorpe and Smith. This is a surprising conclusion and calls for further confirmation by others.

Bonnet's second conclusion was that the plant we now call *C. persicum* was known in France at an early date either as *C. Antiochenum* or *C. e monte libano* (Cyclamen from Mount Lebanon). His conclusion was largely based upon a vellum painting made by Robert at the Jardin des Plantes which bears both of these designations, showing that the artist believed they represented the same plant. A similar conclusion, based upon the same painting, was reached by Decaisne and recorded in *Revue Horticole*, 4 (1855), p 25.

Whatever the uncertainties as to the origin of the combination *Cyclamen persicum* and as to the characters of the plant that name was chosen to designate, Parkinson's description and figure were the first to set forth clearly the characters which distinguish the early form of the Persian Cyclamen and, since his name *Antiochenum* antedates by 19 years the first recorded use of *C. persicum*, it should replace the latter. However both names are pre-Linnaean and the Laws of Nomenclature do not demand that such a change be made.

I have already alluded to Siehe's discovery of the Persian Cyclamen in Cilicia not many miles from Antioch. Even before the time of Parkinson little remained of the original city of that name because of the ravages of wars and earthquakes but a new city had been erected on a neighboring site. At that time it was under Turkish rule and it is now known as Antaika. It is probable that in 1629 it was a small city of some commercial importance and it is not unreasonable to assume

that corms of the Persian Cyclamen, collected on the Cilician plain, were sent to England from Antioch just as many other plants were sent to England from Constantinople. This does not preclude the probability that corms of the same plant reached England from either Palestine or Syria at either earlier or later dates but none of them were adequately described before 1629.

Still another addition to the synonyms of *C. persicum* is *C. latifolium*. This name appeared in 1813 in the second volume of Sibthorpe and Smith's *Flora of Greece*. The description and accompanying plate portray a plant of the Persian Cyclamen probably derived from one of the Greek Islands or from the island of Cyprus. No reference is made to the specific names *persicum*, *Antiochenum* or *indicum* presumably because these authors considered their plant differed from all of those heretofore described. Although succeeding botanists have not been able to discover dependable characters for distinguishing *C. latifolium* from *C. persicum* that name was quite widely used for some time.

In conclusion I will outline two attempted solutions of the problem presented in my introductory paragraph. The first is based on the fact that the specific names *afra* and *africanum* appear in early French botanical publications and the fact that plants which can not be distinguished from the Persian Cyclamen were discovered in 1874 growing naturally near the ruins of the ancient city of Carthage. The theory is that these plants were introduced into France at a very early date and, because of their Carthaginian origin, became associated with the name *punicum* along with the name *afra* and *africanum* and that later the name *punicum* was corrupted into *persicum*. An objection to this theory

is that the plant discovered in 1874 is confined to a very small district south of the Bay of Tunis and it is more probable that the plant introduced at the much earlier date represented a very different species rediscovered in 1840 and now known to be widely distributed along the coastal mountains of Algeria. This species, now known as *C. africanum* is largely cultivated in England and is easily distinguished from *C. persicum*.

The second theory makes use of the fact that Parkinson designated the

flowers of his *C. Antiochenum* as "Peach coloured." It is assumed that, since the Latin name of the peach is *Prunus persica*, the name *persica* may have been chosen to designate this cyclamen because of the resemblance of the color of its flowers to those of the peach, rather than because of its geographical significance. I am more inclined to make the more direct assumption that through confusion of names some of the first plants to be introduced were wrongly thought to have been of Persian origin.

A New Crape Myrtle for Florida

H. F. LOOMIS

Crape Myrtle (*Lagerstroemia indica*) and the Queen's Flower or Queen Crape Myrtle (*L. speciosa*) are rather commonly seen in southern Florida, especially the former whose range of outdoor planting extends into others of the Southern States where the Queen's Flower will not survive the winters. In a genus of more than a score of species these two are the only ones that have become well established in cultivation here, although it has long been recognized by those who have seen them, that most if not all of the species have ornamental possibilities and some are being tested here now.

One of these latter species that seems destined to find a place in ornamental gardening in South Florida was introduced into this country as seed from India in 1934 under the name of *Lagerstroemia tomentosa* and was assigned P. I. No. 106383. From this seed several plants grew and were set in field locations in 1937 at the United States Plant Introduction Garden, Coconut Grove, Fla., for observation. Three of the plants died within the year, two of them possibly from having

been planted in low salty marl soil, but a fourth in high loamy ground survived and appears to have made normal growth. The first time it was seen to flower was in the autumn of 1945 after having passed through the severe hurricane of that season with little injury. The plant at that time was about four feet high, rather spreading in contrast to the upright habit of the Crape Myrtle, and with an abundance of flowers, that lasted for a number of weeks. Since the plant did not answer the description of *L. tomentosa*, being neither tree-like nor having pubescent leaves, specimens were sent to our headquarters office at Beltsville, Md., for study. This revealed that the species actually was *Lagerstroemia floribunda* Jack, a bush or small tree native of Malaya.

The bush has flowered each season to the present and in 1948, when it was nearly seven feet high, it was a particularly handsome sight, remaining in bloom from the first of August until the first of October. This year the plant began flowering in late July, the accompanying photograph of it having



H. F. Loomis

Lagerstroemia floribunda

been made on August 11. The rather compact spikes of flowers are 6 to 12 inches long, erect, and flower slowly from the bottom upwards, accounting in part for the prolonged blooming period. The individual flowers are 35 to 40 mm in diameter, and of a light phlox purple (Ridgway Color Standards) that slowly fades to almost pure white in the eight or ten days they remain on the spike; the petals are broadly spatulate, thin, and have a crape-like texture; the stamens and long filaments are a bright orange-yellow, contrasting with the color of the petals.

The plant is deciduous in the spring but soon the new leaves begin to appear and again the bush is a thing of beauty as when in flower, for, like some other tropical trees and shrubs, the tiny new leaves first are a garnet

red and with bright sun shining through them the branches appear to be clothed in pink blooms. As the leaves enlarge, the red color gradually changes to the normal green of the mature foliage, but each new flush of growth throughout the season is red at first and contrasts handsomely with the green of the older foliage.

This species, with its small stature and long blooming period, is ideal for small dooryard and patio plantings, but many other uses will be found for it, once it becomes well-known. Under good growing conditions many bushes probably will bloom at an earlier age than did the single specimen here for several seedlings from it have flowered in the greenhouse in seven months from seed.

Coconut Grove, Fla.

Chinese Hibiscus and Others

EDWARD TEAS

Seated about the friendly table of the Mallow Family are many useful and beautiful subjects that enrich our daily lives. King Cotton clothes the world in garments of white except when colored to suit man's fancy. And the popular Rose-of-China generally known as the Chinese Hibiscus (*H. rosa-sinensis*) reigns over more than 200 species and wears the royal robes. The ever increasing popularity of these plants richly deserves the attention of flower lovers the country over, especially in the warmer section where they grow and bloom continuously the whole year through unless checked by frost. With slight protection from frost during the winter months they usually survive from year to year and produce a wealth of large showy flow-

ers in all the colors and blendings from deep crimson and scarlet through the tones of rose and pink to pure white, as well as the various shades and blendings of yellow and orange, lavender and rich mahogany in both double and single forms.

A townsman reports a Pink Beauty twenty feet in height a six inch trunk diameter, on which he counted a thousand blooms at one time. He said that there were more but he got tired of counting.

Some varieties produce very large blooms as for example Ruffled Giant on which we have measured blossoms nine inches across, while the dainty little flowers of Psyche and Shirley Temple clothe their plants with attractive flowers like a huge bouquet.

The Chinese Hibiscus is the outstanding flower of the Islands of the South Seas. It is known as "Hawaii's Own Flower." There they are worn in the hair of the women and in Samoa over the ear of the men as well! In their native dances and at other times. They are strewn down the length of their leaf covered "tables" at their feasts or fastened to artificial stems to form the "fountain bouquet." They may be used as solid wall coverings and in colorful displays on the counters at banking houses. Leis made of them are given visitors in sign of welcome.

Various species are found native in the warmer climates from China and the Near East, Australia and the Pacific Islands. Cultivation has made them now almost world wide in distribution but in the Hawaiian Islands they seem to have reached their greatest perfection. There they produce seed which they do not do here or in the coldest sections and there hybridizers have produced thousands of varieties out of which we have been able to obtain those that have reached the greatest perfection in form, size and coloring. Space does not allow the mention of names of varieties of which we have hundreds under observation but suffice it to say that all are good and enrich the home gardens of all flower lovers.

Among the other interesting species, *H. schizopetalus* is responsible for many of the smaller types such as Psyche, Shirley Temple and Hawaiian Hybrid. This species is a favorite with

hybridizers and is frequently seen as well in the gardens of Burma, India and the Near East. It has petals that are fringed into slender thread like bits along the edges, and makes a charming flower hanging down on slender stems from the branches, like fuchsia flowers. *H. cardiophyllus* (heart-shaped leaves) is a very pretty native of the Rio Grande Valley, herbaceous, producing bright crimson flowers of medium size, some three inches across, all summer long over the entire bush. This gem is little known in the trade. *H. Hamabo*, the "Yellow Althea" is a strong-growing species, quite hardy and attaining a height of eight or ten feet covered throughout the summer with bright golden yellow flowers. *H. mutabilis*, the Confederate Rose, is popular in Southern gardens, rank growing, eight to ten feet, usually double, straw colored flowers on opening, pink by noon and red by nightfall. It is quite hardy.

H. moscheutos from which have come the Mallow Marvels, is abundant in moist ground from the Gulf Coast to the far north. Wonders have been wrought by the hybridizers in this interesting species which may be obtained now in colors from the deepest crimson to white with all the intervening hues. *H. coccinea* called Confederate Star is close to the foregoing with showy scarlet flowers but with deeply lobed leaves. Both are good hardy herbaceous perennials.

Houston, Texas.



© Donald Merritt

× *Iris sindpers*

[See page 166]

Iris × *sindpers* (See page 165)

Although there is more to be said on the subject elsewhere in this issue, there is no doubt that there are shifting fashions in the plant world, not all of which, however, are due to actual changes in fashion. In some cases of which this may be one, the real difficulty lies in the first task of propagating a large enough stock of plants to warrant selling, then of maintaining a stock that will not be sold out and finally of persuading enough people to buy the plant and justify keeping it in the nursery where all the preliminary work has

been done. The iris in question, illustrated from an English photograph is such a case. It is not an iris for every garden but is so distinct among the Junos, that one wishes some devoted amateur might make it a project from which he would gain nothing in the way of money, and perhaps little of fame, to propagate it and keep it to himself until he might have the thousands needful for a nurseryman to take over. It blooms early, is reasonably cold hardy and needs chiefly some protection from early and late frosts. Who will be the candidate?

Philadelphus "Belle Etoile"

JOHN L. CREECH*

This hybrid is one of several varieties that are listed as × *Philadelphus purpureo-maculatus*, and like many other named varieties of *Philadelphus* it originated at the Lemoine establishment in France. Last year, when I discussed the Lemoine hybrids (N.H.M. July, 1948), I somewhat ignored "Belle Etoile" and her sisters "Amalthee," "Ophelia," "Sirene" and "Sybille" because they never have flowered satisfactorily with us. Even this year, when most *Philadelphus* behaved beautifully, "Belle Etoile" had only a scattering of flowers all of which had to be taken from one plant to make the accompanying photograph.

As with other hybrids that have *P. microphyllus* in the background, the purplespot hybrids are delicately fra-

grant—such as can only be described as "fruity."

One can conceive of these hybrids, or their Mexican parent, *P. coulteri*, as the basis of a *Philadelphus* counterpart to the purplish *Deutzias*, "Contraste" and "Magicien." Lemoine was on the right track but unfortunately he was not concerned with the winters of northern United States and his purple-spot varieties are not quite adapted to our climate.

In spite of the weakness of this hybrid, I did want to show a photograph of the flowers because they do have unusual color markings. As one approaches the plant, the flowers appear to be pale purple, but actually (as the photograph shows) the petals are white with the purple concentrated at the base surrounding the columns of yellow stamens. It is somewhat of the same "tinted white" effect that is created by striping in azaleas.

*Division of Plant Exploration and Introduction, Bureau of Plant Industry, Soils, and Agricultural Engineering, U. S. Department of Agriculture.



John L. Creech

Philadelphus, "Belle Etoile"

Narcissus Notes

B. Y. MORRISON, *Editor*

Narcissus triandrus hybrids.

(See pages 169 and 170)

Many years ago, certainly in the early 1900s, the Rev. Joseph Jacob, since deceased, wrote a small book called "Daffodils" for T. C. and E. C. Jack of London. At present it is of value and interest chiefly as a matter of history for the named varieties available then have largely disappeared as will the varieties current now in some future time.

As most good gardeners are, he was a man of strong opinions and spoke clearly and often on behalf of daffodils. Sometimes his words were heeded, sometimes not.

The last chapter of his book is called "Addendum" and in it are found bits of value, not always related to one another. For the last of all, he has one paragraph under the special heading "White *Triandrus* Hybrids." It is so short that I shall quote.

"These must have a special notice. Those who have never seen them, should take the first opportunity they get. I refer more especially to those small, pure-white, drooping flowers, which have a special beauty of their own. I often think how I would like to possess a hundred or two of them. They would make such beautiful table decorations in small, low, silver bowls. They are very easily raised. Simply cross either Minnie Hume or Mrs. Langtry with pollen of *Triandrus albus* and then select the best seedlings. If annual crossings are made, once the first wait of three or four years is over * * * there will be a yearly crop of delightful Fuchsia-like bloom, which will more

than repay the trouble and delay."

Minnie Hume and Mrs. Langtry have long departed the scene save in gardens where old favorites are kept, but there are now much finer Leedsii varieties to bear the seed or, as they must be called after 1950, white *Incomparabilis*.

It is notable, however, that *triandrus* hybrids of this type are not common, even today. Should one go to shows, he would probably find only *Thalia*, *Moonshine* and one or two others, all nice but not amazing.

Mr. E. C. Powell has raised any number of charming sorts some of which have been illustrated in this magazine.

Two things were forgotten in writing that first paragraph quoted, namely that one would need to renew his stock of *triandrus albus* from time to time (it comes easily from seed) and he would have to be very patient in waiting for his chosen seedlings to increase, should he care to work up a stock from certain individuals.

The flowers in the two illustrations herewith are from bulbs that were given me by Dr. Stoutemyer who had them, I believe, from Mr. Moncure, who, in turn, had imported them from Mr. Alex Grey in England. The page with three varieties, *Wavelet*, *Waterfall*, *Snowbird*, shows three distinct types of result. The uppermost, *Wavelet*, shows a somewhat irregular perianth as in *triandrus* itself but a wide and frilly cup as from some large Leedsii. *Waterfall*, furthest to the right, shows a flower that is even more characteristic of Leedsii traits, while *Snow-*



Robert L. Taylor

Triandrus Narcissus, received as April Tears, but undoubtedly Dawn



Robert L. Taylor

Triandrus Narcissus:

Upper, Wavelet

Extreme right, Waterfall

Lower, Snowbird

bird with its clipped off cup, is more like a vigorous *triandrus* little altered save in size.

Too late to make any changes it has been shown that the plant I have as April Tears cannot be that variety but is, as suspected, a duplicate lot of the lovely variety, Dawn, a *triandrus poeticus* hybrid for which people seem to be clamoring in this country. It is a lovely thing and Mr. Taylor has captured the quality of the flight-like poise of the flowering stems.

Whatever their parentage, part of the pleasure over and above the shining whiteness, is to be found in the upsurge of the line of growth of the scapes, and the poised look of the blooms themselves. The illustrations

are natural size and the flowers were garden grown with no special grooming and no shelter.

Having made some such crosses myself I can vouch for the correctness of the Rev. Jacob's statement, even if none of mine has even found a small, low silver bowl. Having no need for a large stock of any, no effort has been made to increase any of them save one, and that after tolerating two years of division, disappeared as if by consent!

By all means try this type of cross yourself, and see for yourself the fine results, choosing for *Leedsii* parents some quite chaste and classic beauty and not some of the great creatures, opulent and all that, like Daisy Schaffer who is excellent but not in this role!

B.Y.M.

To be Replaced

As a gardener who has grown plants of one sort or another for nearly fifty years, I can look back with some dismay and some curiosity over the procession of plants that have been in the several gardens where I have worked, and now sometimes wonder why I bought some of them and more often why I allowed some of them to die and disappear with no thought of replacement then or now. It is such sorry thoughts as these that make me wonder a little if other gardeners suffer from the same faults and if we ourselves are not responsible in part for the disappearance of many good plants that nurserymen gather for our use and then abandon for want of sufficient sales. No nursery can afford to maintain indefinitely plants that are never called for unless they happen to be plants like conifers that increase in value as time passes and can be held for the possible customer who will need a

specimen to fill a specific place in his garden scheme.

There was a time when there were added to the old plants of *Pyracantha coccinea Lalandii* the European Firethorn, plants of all the firethorns I could find. They grew well enough until we were visited by a winter of unusual severity that took them off, some entirely and some to the ground. It was then that I lost my plants of what is now called *P. crenulata kansuensis* so that the photograph on the next page is the only reminder that it once grew here. It has never been replaced. The original reason was that such a winter might easily come again, not too good a reason I find, for in another planting made later than that winter there are now plants that appear entirely happy and with enough basal wood so that there would be an even chance of recovery should there come another winter like that first.

The other species and some of its variants, *P. crenato-serrata* died to the ground level but enough vigor was left so that now there is another fine top fighting for its life with exuberant bushes of cotoneasters and others set about the same time. The old canes were cut off nearly at ground level but gave rise to shoots that in turn have been outgrown by later shoots that are as strong and vigorous as the originals.

It can be argued that if the European species comes through without damage there is no need for these problematically hardy species. That is true, but there is a difference in time of coloring in the fruits and in the hues that they display that would warrant better gardening than my own and a replacement. But for gardeners living further south who would not have the hazard of winter freezing to such a degree, these plants are worthy of some investigation and use. The European plant is fairly common even in the areas where the native yaupon makes a somewhat similar display of fruits and there is a fine form brought into the South from California, Gräbner's by name that has large deep crimson red fruits in abundance.

As far as the writer knows, no one has attempted to grow this latter from seed, on the chance that it might produce children with fruits of equal size and substance, but with coats of other colors. This would be well worth doing if one may judge from the plants of the European firethorn that have been raised from seed at the National Arboretum. These last have come in every hue between pale golden yellow and the original deep scarlet and in the late summer and early autumn make as colorful a display as any flowering shrub could make in the Spring. This is largely due to the fact that the fruits are borne in such a fashion that they

stand above the foliage on the fruiting spurs and are not hidden as are the fruits of some other good shrubs.

In the deep South where the interval in Autumn before the beginning of the camellia season is likely to have little of display character, these might well be considered as a variant among the relatively few shrubs that are planted in any man's dooryard. It is true that in the ordinary yard one might not have room for many plants, but there are plenty of places where they might make the dividing screen between yards or between parts of the same yard where now only the too familiar privets reign. They would have the further advantage there, that they would differ greatly in mass and density from the ever popular camellia and lighten the gloom that comes from too much, too dense, dark green foliage masses.

One would also like to see some use of *Photinia serrulata* in the South with its fine new shoots of tender bronzy red, almost as fine in color as any flowering. This is a casualty with me, but one that I cannot defend since it is not reliably hardy here under the best of circumstances.

In quite another department of garden activity is *Lilium medeoloides* that lived happily if briefly in the garden here and died apparently from the constantly increasing shade of shrubs that once were its shelter and defense. It has not been replaced from sheer inertia and possibly because it was not easily found again. It is true that from a garden picture point of view it offers little that cannot be had more certainly from Hanson's lily, but it is a little more delicate in scale and proportions and offers perhaps a more nodding grace.

It does not offer and one hopes that no breeder will invent for it, a size that would bring it into competition with



Pyracantha crenulata kansuensis



Lilium medeoloides

the many trumpet lilies that now usurp the scene in so many gardens, an usurpation that is really quite wonderful when the planting is well designed and the plants kept in health as was the case with the Formosan form of the Philippine lily seem so gloriously last summer in Mississippi when it took over the garden with its tall stems rising through the evergreen shrubs that had long passed their flowering times and had no fruit to decorate the scene.

Another plant that needs a word in season is the so-called blue spirea, nei-

ther blue nor a spirea, but a member of the mint tribe. This with its powder blue flowers in late summer and on to frost adds a color note that is hard to match. It has gone from the garden here and nothing has been done to replace it, though it served well for many years when the garden was sunnier than now and the trees were still in the dimension of shrubs. For warm dry places, it is fine when once established, better than the more cold hardy Chinese later introduction.

A Book or Two

Naturalist's South Pacific Expedition: Fiji. Pp. 303, including index and taxonomic appendix. Otto Degener. Privately printed (Paradise of the Pacific, Ltd., Honolulu, Hawaii, 1949).

The latest work to come from the prolific pen of Otto Degener, this popularized book dealing with an eight-month trip in the Fiji Islands with Mrs. Anne Archbold's Second "Cheng Ho" Expedition, is a welcome addition to botanists and to students of Melanesia as well.

His botanical exploration of the islands took him to the far reaches of the group, and his collections (among them such fascinating novelties as *Degeneria vitiensis*, type of the new family Degeneriaceae) as now distributed in our major herbaria have immeasurably augmented our knowledge of Fijian floristics. His description of these travels is at once interesting to both scientist and lay reader alike, for his often wry humor is capably intermingled with the technical facts inevitably associated with a volume of this type.

Startling descriptions of cannibalism

in the islands are given, as well as chapters devoted to the life of the inhabitants today, subject to amazing supervision by the British. He discusses the origins of the Fijians, the early days of the missionaries in the group and their concomitant hardships, handicrafts and languages of the islands, and, of course, innumerable aspects of the flora. The text is copiously illustrated with a series of superb photographs.

Mr. Degener's earlier works, "Plants of Hawaii National Park: Illustrative of Plants and Customs of the South Seas", and the "New Illustrated Hawaii Flora, or Flora Hawaiiensis" and "Plants of the Tropics," both of which are at present appearing in fascicle form, have already earned for him a wide audience of readers in botanical and gardening circles. This new book on his experiences in the Fijis will greatly add to that following. It is a fascinating and well-wrought work, an extremely capable introduction to one of the lesser-known insular groups of the Pacific.

ALEX D. HAWKES
Coconut Grove, Florida

Vegetable Crops. Homer C. Thompson. McGraw-Hill Book Company, New York, 1949. 4th Edition. 611 pages, illustrated. \$6.00.

Like the editions that have already been issued, this volume prepared in much the fashion of a text book, is good reading none the less and one turns away from reading it with a satisfaction that the new materials incorporated have passed the test with the author whose judgment and knowledge one respects. In his preface the author writes that in the "preparation of this edition the aim has been to bring the discussion on all topics up to date by incorporating the results of investigations that have been made since the publication of the third edition." For the individual worker who may not have access to the great number of separate publications that he might have to assemble in order to find such results, the debt to the author becomes at once apparent. This is a book that all vegetable growers must have, whether they are home gardeners or concerned with commercial production.

The Handbook for Flower Shows. National Council of State Garden Clubs, Inc., New York 1949. Edited by Esther C. Grayson; Prepared by Sarah V. Coombs and Persis S. Crocker, Co-Chairmen. 128 pages, color chart. \$2.50.

This represents an enlargement and revision of the earlier handbook. It should be the first working tool for any garden club that wishes to engage in the perilous and laborious business of holding flower shows. Written with admirable clarity, no small sense of humor and with years of experience behind it on the part of the writers, it has more in it than should reasonably be expected for so slender a volume. No one can ever adequately thank the

persons who have labored to bring together all that is contained in it but one practical and admirable way would be to use it constantly, buying copies for all workers who may be concerned in any flower show, whether modest or pretentious and finding out swiftly how much one may be saved over following his own way which may turn out to be the "hard way."

The Plant in My Window. Ross Parmenter. Thomas W. Crowell Company, New York, 1949. 148 pages, author's line drawings, \$2.50.

This of course is not a "garden book" in the usual terminology but it is the sort of thing or in the direction of the sort of thing that should be born out of good gardening, except that as the real spirit grows it finds less and less necessity for communication.

In brief, a person not used to potted plants and apparently not much used to plants in general moves into a furnished room and finds a languishing philodendron. He tends it, first half attentively but finally with all the attention that he knows, extending his realm of knowledge more and more in time, and finding himself in new circles of existence in New York City. To come upon the wonders of growth as an adult is perhaps something that those of us who have grown up in the plant world cannot quite fathom or imagine but as life is full of lives about which we know little and often care less it is no surprise to an old gardener that the garden world, even in its potted-plant manifestation should amaze an outsider. The growing plant world is full of amazements! Pray God the author has a chance to come on some of the other levels of plant life that will delight as much and perhaps more, and that he will write it all down as pleasantly in word and sketch.

Florist Crop Production and Marketing.

Kenneth Post. Orange Judd Publishing Company, New York, 1949. 891 pages, illustrated. \$10.00.

This book is a 'must' in its field. As one can tell from the number of pages, it is very comprehensive and as such is impossible of real review. Dr. Post has gathered together the most recent findings in all of the fields that relate to the florists' work in one cover so that one need not pursue the facts through the great amount of special publications that he would otherwise have to consult, these are freely cited so that the reader who may wish to go to the originals can do so.

The book is organized in several portions, the first of thirteen chapters giving the general discussions that relate the subject as a whole. The latter and larger portion deals with plants themselves, arranged in alphabetical order and with a definite schematic treatment that touches on all the important facts that need be watched for. The texts are necessarily succinct but are clear and simply told.

Every one, whether a florist or not will read it with profit and if there are omissions or opinions with which some may differ, one need not be concerned too much as we are definitely in debt to Dr. Post for his enormous and valuable work.

Shrubs and Vines for American Gardens. Donald Wyman. The Macmillan Company, New York, 1949. 442 pages, illustrated. \$7.50.

This is a prodigious job. It covers the country rather better than most texts of the sort and is perhaps weakest in the general treatment of vines and of shrub materials for California and Florida, areas that would have contributed very large numbers of species to the already large total.

The great body of the book, pages 92-406 is given over to the very much abbreviated descriptions of those species, forms and varieties (clones) that the author considers to constitute the "General List of Recommended Plants." Pages 412-432 give a "Secondary Plant List" with a very clear discussion as to why these individuals appear in the second rather than in the main list.

Preceding the main body of the text, are interesting chapters on Hardiness (there are zone maps on the inside covers), Order of Bloom, Ornamental Fruits, Foliage Colors, Shrubs for Various Purposes (shade, wet soils, etc.) all of which while greatly condensed merit careful reading.

The many illustrations are most useful in those that show habit of growth.

The book of necessity leaves out various small bits of description that make for more pleasant reading, but no one who has any notion or appreciation of the splendid data so carefully organized, will cavil. There are or will be points on which opinions, personal opinions, will differ. This again is inevitable. Congratulations to Dr. Wyman for his accomplishment; to ourselves for having his work.

Plant and Soil Water Relationships.

Paul J. Kramer. The McGraw-Hill Book Company, New York, 1949. 347 pages, graphs, charts, bibliography, \$4.50.

"In his relatively brief but advanced textbook in the field of plant physiology, one of the leading authorities on the subject gives an integrated discussion of the various factors which effect the absorption of water by the plant. These factors include the availability of soil moisture, the development of efficient root systems, the nature of the absorption process, the relation between the absorption of water and the

absorption of minerals, and the relation between the absorption of water and other plant processes." This is the preliminary copy from the dust cover blurb and will serve well enough here to indicate the type of book.

The text is written in the present day style for technical papers and texts, terse and within a special vocabulary, constantly interrupted by citations that relate to the bibliography. One does not ever read texts of this sort for pleasure; they are sought out and valued for the content that in such a case as this represents the wisdom and skills of the writer and the fruit of his wide reading and experience.

Orchids are Easy to Grow. Harry B. Logan and Lloyd C. Cosper. Ziff-Davis Publishing Company, New York, 1949. 312 pages, illustrated with drawings and color plates. \$6.00.

Any old and experienced gardener will immediately agree that any plant is easy to grow if you give it precisely what it wants when it wants it. He will go further and agree that many plants that have the reputation of being 'difficult' are not in the least if one is faithful in carrying out the knowledge.

The present volume is written with admirable clarity and with no glossing over of the fact that there are certain procedures for orchids and that they cannot be altered or forgotten. Certainly it should do much to temper any fear that the beginner might feel. The color plates are gorgeous and should be beguiling. The language in particular is to be commended for none of the technical jargon survives without explanations and not at all when there is a simple terminology in ordinary English.

The only thing that is not said, perhaps, is that if you garden single hand-

ed, you will probably never take a vacation again, once you start growing orchids. Some one who knows has to be there all the time.

Humus and the Farmer. Friend Sykes.

The Rodale Press, Emmaus, Penna. 1949. 392 pages, illustrated. \$4.50.

This is the American reprint of the third edition, February 1948, of the British issue but with additional appendices and illustrations.

Like other texts of its kind it is the passionate cry and testimony of a man who has practiced what he preaches, in this particular case on a large scale and involving considerable outlays of money. For him, the farm must have animals and must practice the return to the soil of the humus that is prepared in the approved fashion. No one is disposed to disbelieve the testimony nor to question the results claimed, but the continual use of the assertion becomes very wearisome reading and the growing impression that the writer had far more cash at his disposal than many of us would have, or that even some of his immediate neighbors could have had, leaves one a little restless.

Nevertheless, one is grateful for the continued appearance of testimony in favor of humus and more humus and learns to be patient with the vehemence of any evangelist.

How to Grow Annuals. Ann Roes Robbins. The Macmillan Company, New York, 1949. 300 pages, illustrated, \$3.50.

This is a very interesting book, as the writer sets forth clearly in her introduction precisely what she means to do and then in her text does just that. She limits her field to twenty-five annuals, and then tells how they may be combined for good effect in gardens, both for color and for continuation of bloom through the season. The only

point where she allows herself any liberty at all, is in the very free interpretation of the word "annual"; since her free usage has the blessing of custom, no one should cavil over this.

After the detailed discussions of the chosen and elect, there is a more brief but interesting discussion of "every annual I have ever heard of . . . except a few very obscure ones."

There are no serious points for criticism and if one were to regret anything it would merely be that the writer's taste and personal preferences lead her to color choices of the delicate and high-keyed plants rather than to pleasure in anything robust, the few recommended strong colors being in mostly secondary accent plants. One suspects that some of the plants that have luke-warm descriptions were not well placed for their best development, for example, *Bartonia* which will not sprawl if planted in a hot dry site, that is hot and dry after the plants are well established. One regrets that there is no word of warning that *Cacalia* becomes a most disgusting weed in climates where it can self sow, that *Browallia* gets such mild approval (though the words of warning are very sound *re* germination), that *Torenia* is not among the chosen twenty-five and so, but these are personal notions and perhaps colored from having lived far south of Connecticut.

If one were to make a suggestion, it would be only that the author move and garden in a new site every ten years so that she could then write a similar text for each of the new soils and climates.

Abbé David's Diary. Translated from the French by Helen M. Fox. Harvard University Press, Cambridge, Mass., 1949. 302 pages, illustrated, \$5.00.

One is delighted that Mrs. Fox has translated these diaries for though one, they are three since more than one trip of exploration is described. One is grateful also for the longish biographical sketch that makes alive for us the setting from which our Abbé came and the temper of the times that made such a business possible for a missionary in a newly opened country where the wonders of God were more clear to him apparently in Nature than in Man-kind. Gentle and witty he was to be sure, but at times, how inflexible when he might have been yielding.

For us as gardeners, it seems sad that so much time and space had to be given over to the fauna no matter how new, how amazing and so on. But there are plants enough and such wonderful ones. How keenly one would like to go again and again until many that have moved in and out of cultivation have been put once more at our common disposal.

The illustrations bound together in one section are on pale green paper and represent Chinese originals. There are two errors in identification, one for the sheet showing Grasshopper and *Magnolia* and the other of Blooming *Helianthemum*. The *magnolia* is certainly a *gardenia* and the *helianthemum*, a *hypericum* for no *magnolia* has a calyx as such and *helianthemums* are not native to the Orient, while all that area is rich in *hypericums*. But whether correctly named or not the two plates are lovely in themselves.

Since the reviewer could not read the original with ease if he had it, he cannot offer the ultimate in praise for the translation, but this can be said and with pleasure, that the style as presented is quite distinct from Mrs. Fox's own intimate and personal style, so that she has achieved that excellence of bringing to us, not only the content

but the temper of the original. Whether one cared for any of the plants reported, or animals or birds or insects, he could still read this Diary with pleasure and perhaps a little secret chuckle when he compared it with some later diaries of plant hunters.

My Green Thumb Garden Record and Inventory of Plants, Shrubs and Trees. Julia and Kendall Morton in collaboration with Dr. Taylor R. Alexander. Text-House (Florida) Inc., Coral Gables, Fla., 1949. Leatherette cover, loose-leaf filler \$3.50; 100 page refills, \$1.00.

Those of us who have grown old in gardening have a much livelier appreciation of the volume of records than those who are just beginning, for we know that we ourselves have lost much that we could have used for want of a permanent record. Even if we have kept yearly note books, the reviewers' habit, the data are not always available on short notice nor are they as full as they might have been if one had worked on a basis of the printed form which constitutes the alternate pages of this volume. Each printed form is accompanied by a blank page for writing or sketching what you will.

As far as this reviewer can see, every ghastly detail has been thought of and cared for in the printed form so that anything that is wrong later on can be laid clearly on the sloth or stupidity of the user! He will have not a single basis for excuse.

The one great value of such a record, over and above the most apparent value, is that if enough people (of intelligence and dispassionate discernment) could be persuaded to keep such records for endless years, the time would and could come when by pooling all their data in the hands of a competent corps of compilers a vast

amount of data would appear that would eliminate once and forever the vague descriptions of usefulness that must now weaken our horticultural texts. The lesser value, but of more importance to the owner of the book, would be that any intelligent use of the book would so impress the data on the mind, that he would never need to look at the record again, except to verify yearly variations and if every one could be persuaded to learn to draw (an ancestral capacity that antedated writing) that visual image that would be impressed on the same mind would make for endless pleasure. It is a lovely thing, but how I should hate to soil it with my own well calloused garden hands!

Beginner's Guide to Seashore Life. Leon A. Hausman. G. P. Putnam's Sons, New York, 1949. 128 pages, illustrated. \$2.00.

A pocket guide written for and intended for beginners who have an interest in knowing what they are finding when they walk along the seashore. It includes only the commoner things and from the east and west coasts of the United States and Canada. After the very brief introduction, the book is given over to alternate pages of illustration and text; the illustrations are clear and not complicated with too much details, the texts are easily understood by anyone. There have been times when this reviewer wished he had precisely such a volume in his pocket. Unless you are already a specialist, you cannot fail to like this one!

A Traveller's Guide to Roadside Wild Flowers, Shrubs and Trees of the United States. Edited by Kathryn S. Taylor. Farrar, Straus and Company, Inc., New York, 1949. 182 pages, illustrated, maps. \$3.00.

This is precisely what it says it is

in the title. The size of the book makes it possible to put in the glove compartment of the car, into almost any feminine purse and into most pockets! In order to fully use and enjoy the specific information of Part Two which deals with the country state by state, there is a full Part One in which the plan is discussed, the directions for use, set forth, the acknowledgments made, and then a full section with charming marginal drawings, of the plants to be seen. These are grouped according to the color of their flowers in sections according to their orders, and are given telegraphically short descriptions with code numbers that will relate them quickly to the text when you are reading the state texts. The plants are arranged in each section alphabetically by their common names but there is an index that contains the scientific generic names as well.

For a book that had to be condensed successfully in order to make it useful, it has been more successful than any that has come to the attention of this reviewer.

Memoirs of a Rose Man. Tales from Breeze Hill. J. Horace McFarland. Rodale Press, Emmaus, Penna., 1949. 144 pages, illustrated. \$3.00.

There is a brief letter from L. H. Bailey to adorn the first page, an introduction by R. C. Allen and a final bit from Robert Rodale. In between lie fourteen short pieces by Dr. McFarland himself, written with some continuity of thought but not closely knit as in a studied memoir, and not all having to do with roses. As a book of memoirs it is a poor thing; as a separate bit of record of a vivid and strongly extrovert personality concerned with gardening in general and with roses in particular, it must take its place. Without a doubt, readers in

1960 will have a somewhat different perspective from those of us who have lived in the same time.

Garden Facts and Fancies. Alfred Carl Hottes. Dodd Mead and Company, New York, 1949. 370 pages, illustrated by the author. \$4.00.

This is a difficult book to review. It has something of the personal quality and value of a diary in that it reflects the mature thoughts of the writer; it has something of the character of an anthology, in that it contains also, work of various writers and others, that the author-compiler feels pertinent to the main thread of his thinking.

When you read it, be sure to read first and carefully, the opening section in lieu of preface, "Just a Word." Here the author declares himself. Whether or not you may like what has been done, the way in which it has been done or whether you will find fault will depend very largely upon you yourself at this moment in your personal development. This reviewer does not like it, but he is probably quite wrong, since the whole manuscript in parts has been submitted to many persons over the years and they have liked it, and moreover, the reviewer knows that some of the things that mean most for him, mean nothing at all to others. The reviewer does go along with the author with the main thesis as outlined in "Just a Word," and sadly admits his fault of lagging interest elsewhere.

Stone Mulches in the Garden. J. I. Rodale. The Rodale Press, Emmaus, Penna., 1949. 164 pages, illustrated. \$3.00.

One has the feeling that this may have been born of the need for making a virtue of necessity, since there are places in Pennsylvania where there is

a natural stone mulch over the fields and one could hardly do otherwise. No one could argue against the statements that a mulch of stones will conserve moisture in the soil beneath but whether one would be justified in buying stone to use as mulch is open to doubt.

If you live, therefore, in a country where rocks are the important element in the garden scene, stop trying to get rid of them and use them as outlined here. But if you are wise, read in particular the chapter in which the planting is outlined for the report of the experimental farm, and do not fail to note that the soil is described as deep and friable, that fertilizers of rock origins were used, that there is no statement of whether or not rocks were left in the soil, that there is no statement of what kind of rocks were used and that there is no report of the behavior of the vegetables that might have been growing in the same field after June; also, that there is no report on a check area where no rock mulches were used.

Iris for Every Garden. Sydney B. Mitchell. M. Barrows and Company, Inc., New York, 1949. 224 pages, illustrated in color. \$3.00.

The name of Sidney B. Mitchell has long been associated with the horticultural world and with iris in particular. His other writings have already endeared him to many readers, whether they lived in his part of the country or not. This volume will add to his followers for it is written with the same charm and with the same richness of content.

Any one who attempts to write a popular text on any one plant is immediately restricted since there are only so many things that may be said about any plant and these fall into a well known pattern. Variations come

only in the skill of presentation and the asides that may be in order when the plant has been the subject of improvements, whether of selection or of breeding. All are said here and well said. The old hand at iris culture will not find much that is really new but will enjoy the "being-brought-up-to-date" in what is going on, very gently done since some critical judgment has to be used in deciding what is to be left out. The new comer will find the necessary stimulus to take hold whether merely for beginning culture or for undertaking the downward path that most iris growers take, namely the production of his own seedlings.

The one place where there may be differences of opinion will be in the reading of the section devoted to suggestions for use in gardens. As there is no thought that these are more than suggestions, there can be no quarrel. There is, thank Heaven, no section of iris in flower arrangements!

Crop Management and Soil Conservation. Joseph F. Cox and Lyman E. Jackson. John Wiley and Sons, Inc., New York 1948. Second Edition. 527 pages, illus.

While this book is presented rather in the form that we are used to consider that of the text book, it need not be read in such a fashion. Its major purposes, distinct, and yet interrelated are to present "in a simple way the major operations that will enable the grower to grow and market his crops successfully" and yet to do so within the growing consciousness of need of an overall production program that will yield the harvests within a great plan but on a basis that will maintain the fertility of the soil and safeguard it against any future.

The scope of the planning is that of

the farm, not of the garden and the crops considered are farm crops not garden crops. The gardener who must work within the confines of his small plot, however, cannot fail to find in it much of use to him and certainly will come away from his reading with a fuller concept of the importance of farming in the country as a whole and of its relation to him as an ordinary citizen.

Manual of Cultivated Plants. Revised Edition. L. H. Bailey and others. The Macmillan Company, New York 1949. 1116 pages, illus. \$17.50.

For the home gardener who wishes to go one step further in his knowledge and understanding of the relationships of plants in the great plant kingdom, who wishes to find the accurate name of the cultivated plant that is not merely a horticultural clone or a garden hybrid, this compact volume will probably be the answer. His one complaint will be the inevitable weight, for its pages indeed make a book. He will have no complaint to offer as to

the clarity of the printing, the beauty of the drawings and the care with which the text has been prepared. He may, if he is a beginner, find a certain amount of amusement in the antics to which taxonomists are prone, but when he comes to know taxonomists in the flesh his feelings will be modified, since with taxonomists rests the responsibility of keeping the nomenclature of plants in order, historically and factually.

The present reader will find the current revisions that represent the last word in botanical knowledge and will find it in terms that he can fully understand.

It is not a book for casual reading. It is a book of reference and as such is one that will be of use in the difficult field of cultivated plants that have to be considered on the one hand from their scientific background and on the other from their use in horticulture. These are the two factors that have determined the contents. The treatment and development within the treatment should please the most captious.

The Gardeners Pocketbook

Turnera ulmifolia (See page 185)

Although descriptions of his herbaceous perennial can be found in many of the British garden books of the last century, this is our first actual acquaintance with the plant. The genus *Turnera* is described as being rather weedy plants, mostly from Tropical America, but the particular species mentioned here, *T. ulmifolia*, "The Sage Rose," is rather attractive when

in flower. The plants out-of-doors in the Washington, D. C., area are about two feet tall with dark green, crisp foliage that is so well brought out in the photograph. The leaf margins are sawtoothed and a gland is located on either side of the leaf blade. These produce a rather disagreeable odor that most resembles that of some marigolds. The flowers are solitary and sit almost sessile at the base of the leaf blade. This is the result of the union

of flower stalk and petiole of the leaf in one structure, connate in a strict botanical classification. Two leafy bracts subtend each flower. The flowers themselves are sulphur-yellow in color, about the size of our common petunia and odorless. Our plants raised from seed from Costa Rica and planted in the open in the spring of 1949 bloomed from July to September and well into October, but the individual flowers are a one day affair and once closed do not reopen. On bright midsummer days they are closed by ten o'clock in the morning but as September approaches or on cloudy days, they may stay open until noon. A large round seed pod is left sitting on the leaf, and these are filled with the tiny seeds.

The plants have grown well in full sun in a well-limed soil, and thrived under Washington summer climate. Our main interest now will be to observe how the plants survive the coming winter.

JOHN L. CREECH.

U. S. Department of Agriculture

Hedera

That the genus *Hedera* and especially the species *Hedera Helix* are capable of very great variation was given some attention. It appears that a type was developed about 1940 by nurserymen which was very tight-leaved, many-branched and slow growing which had a large distribution commercially as a house plant. It came to Denmark from America and was propagated under several popular names such as "Chicago ivy," "California ivy" and "star ivy," and at the same time could be found advertised under the Latin names *Hedera helix* var. *frutescens* and *Hedera helix* var. *polyphylla* for which no descriptions could be found. Since its arrival it has demonstrated its ability

to mutate into several different forms.

In order to straighten out the confusion in names, the history of Danish variations was studied and the synonymy was happily clarified. Next in order was the problem of discovering the proper Latin name for this variety. In the monograph of the genus *Hedera*, published in *Gentes Herbarium*, Vol. 6, fasc. 3, 1942, by George H. M. Lawrence and Arnold E. Schulze, the variety has been named and described as *Hedera Helix* var. *Pittsburgh*. This variety is a highly variable plant in America just as it is here in Denmark and continuously has thrown off new forms. In 1942 there were in America at least 14 clones and one can be assured that a comparison of the forms in Denmark with those in America will show many to be identical. For example, a form found at Århus and called "Coral ivy" appears to be identical to an American form described in the above monograph as *Hedera Helix* var. *Holly*. A variation of *Hedera Helix* var. *Pittsburgh*, called "Ramosa complex" in America, has been described in Denmark in *Gartnertidende*, No. 17, p. 203. 1948. In this same article are described two new forms which have received the names of *Hedera Helix* var. *compacta* and *Hedera Helix* var. *microphylla*, as well as a monster form called *Hedera Helix* var. *monstrosa*. Since the monstrosity sometimes appears only on one side of a leaf, there was some suspicion that the cause might be a virus, but this has not been demonstrated on investigation. Undoubtedly, new forms will continue to appear as cultivation continues.

Aside from this special group of *Hedera*, studies were made on other varieties found in the Botanical Garden, in the garden of the Agricultural College as well as in various other places. It was demonstrated that many of the



John L. Creech

Turnera ulmifolia

[See page 183]

forms could be identified from descriptions found in the above mentioned monograph at least as far as the general group to which they belonged. Just as in the Pittsburgh group, the other varieties showed some tendency toward variation even though perhaps not as much as in the Pittsburgh type. In the whole series of *Hedera* varieties and forms, it appears that vegetative characteristics are not fixed, but fluid, so that old descriptions of a particular type often no longer fit the present growing examples. And, because of this, the forms appear in groups. Besides the Pittsburgh complex and the *Ramosa* complex, one can recognize four other such groups in *Hedera helix* differentiated according to leaf shape, namely: *pedata*, *sagittifolia*, *deltoides* and *digitata*.—From BERETNING om Botanisk Haves Virksomhed, I Årene, 1944-1948, p. 24-26. Translation by C. O. Erlanson.

Let's Revive the Epicures

Miss McIlvaine's "Flavor in Tomatoes" hit a responsive chord here for we have long despaired the loss of quality in many fruits and vegetables.

I am whole-heartedly in favor of her suggestion that the few remaining epicures band together for the return of good eating.

There are three reasons for the downward trend in flavor which immediately present themselves.

First, consider the plight of the present generation! Just as it knows nothing of good business government, having grown up with New Dealism, it knows nothing of grandmother's good cooking because she was too busy playing bridge to bother. The delicatessen store, the bakery and canned food were so accessible and easy.

Second, for commercial purposes flavor has been bred out in the effort

to get produce which develops fast and handles well.

Third, that demon speed steps in again. Quick and easy chemical fertilizers doing the soil no good and sprays for this and that poisoning the soil more and more seem to be the general idea.

In my grandfather's day almost everything was raised on a farm, all of the waste went back on the land and there weren't the pests that the one-crop farms of today have brought.

We hadn't heard of vitamin pills, butter had a quality and flavor long forgotten, buttermilk was not synthetic, potatoes were not the soggy, tasteless things they are now. There was variety in cantaloupes too, whereas today we have just one unexciting kind available. What has happened to the Jenny Linds and the Rocky Fords?

We, too, have tried Ponderosa and Ox-heart tomatoes and been disappointed. They used to be excellent. Last year our gardener got some plants for himself and the fruit was so good that we asked what they were. They were the Stone variety. This year Stone seeds were listed and we are trying them. The long drought may keep us from finding out whether the source of seed has any influence.

The gardener has to be a hardy perennial to be able to withstand all of the adversities, but the rewards are so great, health, beauty, the grand feeling of achievement and good eating, for he who raises his own can choose for flavor.

RUTH STEVENSON.

Connecticut.

Flavor in Vegetables

Cauliflower used to be one of my favorites, but now I scarcely ever am able to obtain one of the delicious old fashioned variety. They grew loose,

slightly greenish delicate heads that melted in one's mouth and had a delicious flavor. I understand they do not transport well, but why do the farmers in the district not grow them? In Indianapolis they still have the good varieties, at least when I was there about ten years ago, they still had them—I almost lived on cauliflower.

The same thing is true of lima beans.

Why our people prefer size to flavor I cannot imagine. It seems to me a lack of taste and judgment. Apples, cherries are often without flavor too.

To go back to lima beans, some forty years ago we used to grow quantities of pole limas that grew very large but when picked young, about $\frac{3}{4}$ -inch long, were flat, very green and simply marvelous in flavor and only slightly starchy, not more than a young pea.

I can no longer find this seed anywhere.

In France, as should be, flavor comes first, and I hope, some day before long, the American people will realize that the French are right and that size means nothing when it destroys flavor.

MARY K. GIBSON.

Wynnewood, Pa.

DEAR B. Y.:

On page 141 of NATIONAL HORTICULTURAL MAGAZINE, just received, is request for suggestions as to crevice plant for shade, with fragrance and evergreen.

While hardy in your region, very fragrant, and asking shade and a little moisture, I suggest *Mentha Requini*, Requin Mint, as filling all the requirements, except perhaps evergreen. The next difficulty would be to find the plant, and you may have to import seed from Correvon & fils, Switzerland.

STEPHEN F. HAMBLIN.

Lexington, Mass.

From Oregon

Of the unusual weather here on coast past winter—It did the tulips something special.

Camellia cuttings rooting on sand hillside exposed and covered with ice and snow—felt no damage and rooted and now potted up—those in coldframe kept moist and well soaked just before the freeze—some heaved and were reset after medium (can't make out the word) thawed.

Rooted six months aucuba cuttings lost all leaves—have just now started into new leaf growth—in fact most everything that seemed damaged has taken a new lease on life and am sure will be all right.

JOSEPHINE KEHL.

Bandon, Ore.

From Connecticut

One little evergreen pet of mine, my *Pachistima Canbyi*, never looked better. There is a plant that I think merits more praise and recognition. It spreads neatly, not rampantly, but consistently. Early in Spring it greets the new season with tiny but brilliant little red "flowers" on the dark green branch tips. Then before you have hardly had time to appreciate this offering it starts its wealthy growth of fresh green new shoots, a lighter, brighter green cloak for the spring fashion show.

For all its constant busy development it does not ever seem to care to overgrow its neat low height but as its branches lengthen they reach out along the ground, almost clinging and completely hiding the soil. By fall it appears that many of the longest ones have pushed into the soil far enough to form roots, and new plants as lovely as the original become evident, out beyond the edges of the mother plant.

How easily these may be separated,

or at what time, I have not yet found out for my *Pachistima* family seems quite congenial and shows no signs of starvation so I have not risked disturbing them. I hope to dare to separate a few new plants for other locations where they are needed but would hate to lose even one. For me this lovely little evergreen is fool-proof, bug proof, and disease proof—a real joy to own—and it doesn't mind shade either.

One more common plant I find very useful, tough, but easily controlled is *Baptisia*. I grew my own from seeds I picked off my mother-in-law's plants

and planted one fall. I believe every seed grew. This is their third year and the new plants are budded to bloom for the first time. However, they ask almost no attention and clumps or hedge-like rows are most useful in hard to plant locations.

A local florist amused me a great deal last spring when he included in a bouquet some sprays identical with those blooming in my garden on some older plants, and called the sprays—"this beautiful early blue lupine"!

MRS. H. TAYLOR GRIMSHAW.
East Hartford, Conn.

Index to Volume 28

Figures in *italics* indicate illustrations

<i>Abies lasiocarpa</i>	83, 116, 124	<i>Campanula aurita</i>	127
<i>Aconitum dephinifolium</i>	70, 128	<i>lasiocarpa</i>	126
African Violet, Pink Beauty	89, 90	<i>rotundifolia</i>	65
<i>Allium cernuum</i>	65	<i>uniflora</i>	126
<i>schoenoprasum sibiricum</i>	124	<i>Cassiope mertensiana</i>	80
<i>Anemone decapetalum</i>	90	<i>tetragona</i>	126
<i>Antennaria campestris rosea</i>	65	<i>Castilleja fulva</i>	74, 80
<i>Arnica obtusifolia acuta</i>	122	<i>miniata</i>	80
<i>Artemisia frigida</i>	65	Chidamian, Claude:	
<i>Athyrium Filix-foemina</i>	129	<i>Camellia sasanqua</i>	1
Azaleas, Two Old Indian	44	<i>Clematis verticillaris columbiana</i>	66
Azaleas:		<i>Corallorrhiza maculata trifida</i>	120
Flag of Truce	46, 47	<i>Cornus stolonifera</i>	69
Iveryana	44, 45	<i>Corydalis pauciflora</i>	83
Bate, Alfred:		Crape Myrtle, A New for Florida	161
<i>Crocus, Vanguard</i>	101	Creech, John L.:	
<i>Dianthus, Old Spice</i>	102	<i>Philadelphus, Belle Etiole</i>	166
Roses in the Garden Picture	20	<i>Philadelphus Notes</i>	84
Blasdale, Walter C.:		<i>Turnera ulmifolia</i>	183
The Early History of the		<i>Crocus, Vanguard</i>	101
Persian <i>Cyclamen</i>	156	<i>Cyclamen, The Early History of</i>	
Botanical Magazine, The	147	the Persian	156
<i>Boykinia Jamesii</i>	138, 139	<i>Cypripedium passerinum</i>	120
<i>Brassavola nodosa</i>	92, 93	<i>Delphinium scopulorum</i>	
<i>Camellia sasanqua</i>	1	<i>glaucum</i>	70, 128

<i>Dodecatheon frigidum</i>	80	<i>Hedysarum Mackenzii</i>	70
<i>Draba glabella</i>	116	Henry, Mary Gibson:	
<i>incerta</i>	116	Collecting Plants Beyond the	
<i>lonchocarpa</i>	116	Frontier in Northern British	
<i>nivalis</i>	116	Columbia, VII and VIII	65, 114
<i>Dryas intergrifolia</i>	120	<i>Stachyurus praecox</i>	96
<i>Dryopteris fragrans</i>	69	<i>Hibiscus cardiophyllus</i>	164
<i>Erigeron compositus trifidus</i>	128	<i>coccineus</i>	164
Forsythias, The	51	<i>moscheutos</i>	164
<i>Forsythia</i> , Arnold Dwarf	53, 54	<i>mutabilis</i>	164
Arnold Giant	54	<i>Rosa-sinensis</i>	163
<i>europaea</i>	54, 56	<i>schizopetalus</i>	164
<i>Giraldiana</i>	54	<i>Juniperus horizontalis</i>	66
<i>intermedia</i>	51, 54, 57	<i>Kalmia polifolia</i>	82, 83
<i>densiflora</i>	54, 58	<i>microphylla</i>	126
<i>pallida</i>	53, 54	<i>Lagerstroemia floribunda</i>	161, 162
<i>primulina</i>	53, 54	<i>indica</i>	161
<i>spectabilis</i>	53, 54, 59	<i>Linum Lewisii</i>	65
<i>vitellina</i>	54	<i>Lithospermum incisum</i>	65
<i>japonica</i>	54	<i>Listera borealis</i>	122
<i>saxatilis</i>	54, 59	<i>cordata</i>	122
<i>ovata</i>	52, 54, 59, 60	Livingston, Alida:	
<i>ovata</i> × <i>europaea</i>	54	More About Peonies	93
Spring Glory	54	<i>Lobelia cardinalis</i>	130
<i>suspensa</i>	54	<i>Lonicera glaucescens</i>	70
<i>atrocaulis</i>	54	<i>involuta</i>	69
<i>decipiens</i>	54	Loomis, H. F.:	
<i>Fortunei</i>	53, 54, 58	A New Grape Myrtle for	
<i>pallida</i>	54	Florida	161
<i>pubescens</i>	54	Lady of the Night	92
<i>Sieboldii</i>	52, 53, 54, 61	The Nipa Palm of the Orient ..	4
<i>variegata</i>	54	<i>Lupinus arcticus</i>	73, 80
<i>viridissima</i>	51, 54, 63	McIlvaine, F. E.:	
<i>bronxensis</i>	53, 54, 62	Flavor in Tomatoes	88
<i>Koraensis</i>	54	Magers, Mrs. H. P.:	
Foster, Mulford B.:		A Native Prairie Anemone	90
My Plant Has a Temperature ..	10	Marriage, Kathleen:	
Fox, Helen M.:		<i>Boykinia Jamesii</i>	138
Sages for the Garden	103	<i>Gilia Nuttallii</i>	140
Furniss, George B.:		<i>Mertensia paniculata</i>	70, 114, 128
Amaryllis Hybrids	135	<i>Mimulus guttatus</i>	66
<i>Nandina domestica</i>	94	Morrison, B. Y.:	
<i>Gilia Nuttallii</i>	140, 141	<i>Achimenes</i>	23
Green, Eldred:		<i>Myosotis alpestris</i>	78
Some Notes on Dwarf		<i>Nandina domestica</i>	94, 95
Vegetables	97	<i>Nipa fruticans</i>	4, 5, 6, 7, 8
<i>Habernaria orbiculata</i>	69	<i>Opuntia fragilis</i>	65, 67
<i>Hedera</i>	184	<i>Orchis rotundifolia</i>	69

<i>Oxytropis arctobia</i>	126	<i>mellifera</i>	113
<i>hudsonica</i>	83	<i>microphylla</i>	110, 111
<i>saximontana</i>	77, 78	<i>officinalis</i>	103, 105, 107
<i>splendens</i>	83, 126	<i>patens</i>	110
<i>Penstemon procerus</i>	70, 128	<i>Pitcheri</i>	104
Peonies, More About	93	<i>Przewalski</i>	106
Philadelphus, Belle Etoile	166, 167	<i>sclarea</i>	103
Philadelphus, Named Clones	87	<i>sclarea</i> var. <i>Turkestanica</i>	104
<i>Philadelphus coronarius</i>	86	<i>splendens</i>	104, 108
<i>grandiflorus</i>	84	<i>superba</i>	106
<i>hirsutus</i>	84	<i>sylvestris</i>	106
<i>incanus</i>	84, 86	<i>verticillata</i>	106
<i>inodorus</i>	84	<i>virgata</i>	106
<i>insignis</i>	84	<i>Saxifraga caespitosa</i>	126
× <i>magnificus</i>	84	<i>cernua</i>	80, 126
<i>pubescens</i>	84	<i>flagellaris</i>	126
<i>satsumanus</i>	84	<i>nivalis</i>	126
<i>Schrenkii</i>	84	<i>oppositifolius</i>	116
<i>subcanus</i>	85, 86	<i>tricuspidata</i>	80, 126
Philadelphus Notes	84	Sherrard, Drew :	
<i>Philodendron bipinnatifidum</i>		Double Trilliums	98
10, 11, 12, 13, 14,		<i>Smilacina racemosa</i>	66
16, 17, 18, 19		<i>Stachyurus praecox</i>	96
<i>Pinguicula vulgaris</i>	66	Stephenson, Ruth A. :	
<i>Polemonium caeruleum</i>		Let's Revive the Epicures	186
<i>acutiflorum</i>	70, 114, 117, 124	<i>Nandina</i> in Connecticut	95
<i>Polypodium virginianum</i>	70	Synge, Patrick M. :	
<i>Primula egalikensis</i>	83	The Botanical Magazine	147
<i>Prunus demissa</i>	69	Teas, Edward :	
<i>Ranunculus pedatifidus</i>		Chinese Hibiscus and Others	163
<i>cardiophyllus</i>	72, 74	<i>Thalictrum occidentale</i>	78
<i>Rhododendron albiflorum</i>	80	<i>Thelypteris Robertiana</i>	70
<i>Ribes oxycanthoides</i>	70	Tomatoes, Flavor in	88
<i>Rosa acicularis</i>	70	Trilliums, Double	98
<i>Salix alaxensis</i>	116	<i>Trillium ovatum</i>	98, 99, 100
<i>brachycarpa</i>	70	<i>Turnera ulmifolia</i>	183, 185
<i>polaris</i> var. <i>setwynensis</i>	116	Vegetables, Some Notes on	
<i>Salvia azurea</i>	104	Dwarf	97
<i>Brandegeeii</i>	112, 113	<i>Viburnum Carlesii</i>	146
<i>carduacea</i>	113	<i>suspensa</i>	146
<i>Clevelandii</i>	111	<i>Tinus</i>	146
<i>coccinea</i>	103, 110	<i>Viola adunca</i>	70
<i>Columbariae</i>	113	<i>orbiculata</i>	80
<i>elegans</i>	109, 110	<i>nephrophylla</i>	114
<i>farinacea</i>	104	<i>renifolia</i> <i>Brainardii</i>	70, 80
<i>glutinosa</i>	106	Warner, Majorie F. :	
<i>Greggii</i>	110	<i>Cardinalis</i> <i>Barberini</i>	130
<i>heirosolymetana</i>	106	Wyman, Donald :	
<i>horminum</i>	104	The Forsythias	51

